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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,527	10/17/2003	Maarten Menzo Wentink	088245-2502	7957

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EXAMINER	
ANDREWS, LEON T	
ART UNIT	PAPER NUMBER
2462	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/688,527	WENTINK, MAARTEN MENZO	
	Examiner	Art Unit	
	LEON ANDREWS	2462	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-4,6,11,12,15,17-22,24,29,30,33,35-40,42,47,48 and 51-53* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☒ Claim(s) *8-10,16,26-28,34,44-46 and 50* is/are allowed.

7)☒ Claim(s) *1-4, 6,11-12,15,17-22,24,29-30,33,35-40,42,47-48 and 51-53* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Reopening of Prosecution after Pre Appeal Brief Request

1. Applicant's arguments filed July 14, 2011 have been fully considered and are persuasive. The Final Office Action of March 16, 2011 has been withdrawn. However, upon further consideration, new grounds of rejection are made. See rejection below for full details.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1-4, 6, 20-22, 24, 38-40 and 42** are being rejected under 35 U.S.C. 103(a) as being unpatentable by the Admitted Prior Art (hereinafter APA) in the Background of the application (Pub. No.: US 2004/0136339 A1) in view of Awater et al. (Patent No.: US 7,046,649 B2) and Brommer (Pub. No.: US 2009/0310619 A1).

Regarding Claims 1, 6, 20, 24, 38 and 42, APA discloses an access point (Fig. 1, local area network 100), method (method for transmitting using modulation scheme, ¶ [0014], page 1, lines 1-4) and article of manufacture including a non-transitory computer-readable medium having instructions stored thereon comprising:

a memory comprising a computer-readable program: and

a processor operably coupled to the memory and configured to execute the computer- readable program to cause the access point to

determining at an access point a power save status of a first device configure to communicate in accordance with first modulation scheme (Fig. 1, local area network 100 comprises 101, 102-1 and 102-2 where only one terminal can transmit at a time and 101 uses a first modulation scheme, ¶¶¶ [0003], [0005], [0006], page 1, lines 2-6, 1, 1); and

responsive to a determination that the first device is not in a power save state,

(i) enabling transmission protection at the access point; and

(ii) transmitting, from the access point, a message requesting that a second device enable transmission protection, wherein the second device and the access point are configured to communicate in accordance with the first and second modulation scheme (Fig. 1, stations 101, 102-1 and 102-2 communicate with the modulation scheme available to both them where station 101 having first modulation scheme, stations 102-1, 102-2 having both first and second modulation schemes with 101 and 102-1 communicate with each other using the first modulation scheme, and station 102-1 communicate with station 102-2 using the second modulation scheme, ¶s [0005] - [0009], [0012], page 1, lines 1, 1-3).

APA Fig. 1 which depicts a Local Area Network and which includes a medium, memory and processor fails to specifically disclose non-transitory computer-readable medium, memory and processor coupled to the memory. .

But, Atwater et al. discloses a computer, column 4, line 3, Fig. 6, DMA 610 and CPU 622 coupled to memory.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Atwater et al.'s limitation because this would have allowed the transceivers residing in the computer to transmit and receive, (column 4, lines 1-3.

Combination of the APA and Atwater et al. fails to specifically disclose the device is not in a power save state, transmission protection at the access point and transmitting from the access point, a message requesting that a second device enable transmission protection.

But, Brommer discloses in Fig. 4b where AP station receives RTS from U1 and U3 which indicates that U1 or U3 are not in the power save status, Fig. 4b, AP station enabling transmission protection sends CTS to D1 and D3 and based on the RTS from U1 and U3 the access point broadcasts a CTS where there is a duration field in the RTS and CTS so that all the stations know to be quiet with the access point also being quiet when U1 and U3 transmit, ¶ [0062], page 5, lines 13-20.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Brommer's limitation because this would have

allowed the device not in power save mode and the enabling and requesting of transmission protection, Fig. 4b, ¶ [0062], page 5, lines 13-20.

Regarding Claim 2, APA discloses the method of claim 1 wherein determining the power save status of the first device comprises: transmitting one of a Request-to-Send frame, a Data frame, and a Null frame to the first device; and receiving one of an Acknowledgement frame and a Clear-to-Send frame from the first device.

Combination of the APA and Atwater et al. fails to specifically disclose the transmitting one of a Request-to-Send frame, a Data frame, and a Null frame to the first device, and receiving one of an Acknowledgement frame and a Clear-to-Send frame.

But, Brommer discloses in Fig. 4b RTS from U1 which indicates U1 power save status and CTS to D1 where information is transmitted in the request-to-send (RTS) packets, clear-to-send (CTS), and data packets, ¶ [0062], page 5, lines 18-20, and in Fig. 4b receiving ACK1 and CTS from D1.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Brommer's limitation because this would have allowed the transmitting in Fig. 4b of RTS, CTS and data packets, ¶ [0062], page 5, lines 18-20

Regarding Claims 3, 21 and 39, APA discloses the device, method and article of manufacture wherein transmitting the message requesting that the second device enable transmission protection comprises broadcasting a management frame.

Combination of the APA and Atwater et al. fails to specifically disclose the broadcasting a management frame.

But, Brommer discloses in Fig. 4b AP transmits the poll to D2 with CTS with ACK2 from D2.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Brommer's limitation because this would have allowed in Fig. 4b the polling (broadcasting) to D2 with CTS to enable transmission protection.

Regarding Claims 4, 22 and 40, APA discloses the device, method, access point and article of manufacture wherein the management frame is one of:

(i) a Beacon frame indicating that protection status is active; and

(ii) a Probe-Response frame indicating that protection status is active.

The combination of APA and Brommer fails to specifically specifically disclose Beacon frame and a Probe-Response frame with protection status active.

But, Atwater et al. discloses Beacon frames sent at a regular interval by an AP, column 2, lines 5-6, and Probe Response frames sent by AP, column 2, lines 9-10.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Atwater et al.'s limitation because this would have allowed the Beacon frames to allow STA to monitor and Probe Response frames to allow STA to actively scan AP on a channel, column 2, lines 5-12..

4. **Claims 11-12, 15, 17-19, 29-30, 33, 35-37, 47-48 and 51-53** are being rejected under 35 U.S.C. 103(a) as being unpatentable by the APA in the Background of the application in view of Awater et al.

Regarding Claims 11, 29 and 47, APA discloses the device, method, access point and article of manufacture wherein the management frame is one of:

(i) a Beacon frame indicating that protection status is active; and

(ii) a Probe-Response frame indicating that protection status is active.

APA fails to specifically disclose Beacon frame and a Probe-Response frame with protection status active.

But, Atwater et al. discloses Beacon frames sent at a regular interval by an AP, column 2, lines 5-6, and Probe Response frames sent by AP, column 2, lines 9-10.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Atwater et al.'s limitation because this would have allowed the Beacon frames to allow STA to monitor and Probe Response frames to allow STA to actively scan AP on a channel, column 2, lines 5-12..

Regarding Claims 12, 30 and 48, APA discloses the device, method and article of manufacture, wherein the message received from the second device is a legacy modulation frame (Fig. 1, 102-1 using first modulation scheme, ¶¶ [0007], [0009], page 1, lines 1-2, 1).

Regarding Claims 15, 33 and 35, APA discloses the device and method,

wherein the first/second modulation scheme (Fig. 1) is based at least in part on one of Barker modulation and Complementary Code Keying modulation; and

wherein the first/second modulation scheme (Fig. 1) is based at least in part on Orthogonal Frequency Division Multiplexing modulation.

APA fails to specifically disclose Complementary Code Keying modulation and Orthogonal Frequency Division Multiplexing modulation.

But, Atwater et al. discloses CCK, Complementary Code Keying, column 1, lines 43-44, and OFDM, Orthogonal Frequency Division Multiplexing, column 1, lines 47-48.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Atwater et al.'s limitation because this would have allowed the stations to communicate to the access points, column 1, lines 28-32.

Regarding Claims 17 and 51, APA discloses the method and article of manufacture,

wherein the first modulation scheme (Fig. 1) is based at least in part on Orthogonal Frequency Division Multiplexing modulation; and

wherein the second modulation scheme (Fig. 1) is based at least in part on one of Barker modulation and Complementary Code Keying modulation.

APA fails to specifically disclose Complementary Code Keying modulation and Orthogonal Frequency Division Multiplexing modulation.

But, Atwater et al. discloses CCK, Complementary Code Keying, column 1, lines 43-44, and OFDM, Orthogonal Frequency Division Multiplexing, column 1, lines 47-48.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Atwater et al.'s limitation because this would have allowed the stations to communicate to the access points, column 1, lines 28-32.

Regarding Claims 18, 36 and 52, APA discloses the device and method and article of manufacture, wherein the transmitting is one of (i) periodic and (ii) sporadic.

APA fails to specifically disclose transmission is periodic.

But, Atwater et al. discloses periodic transmissions, claim 29, column 15, line 40.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Atwater et al.'s limitation because this would have allowed the first system not to transmit when the second system is receiving, claim 29, column 15, lines 42-44.

Regarding Claims 19, 37 and 53, APA discloses the device, method and article of manufacture, wherein the first frame further comprises instructions to refrain from transmitting frames for a time interval (duration field in the frame contained a value that indicated how long the terminal should refrain from transmitting to cover the length of time for transmission using the second scheme, ¶ [0016], page 1, lines 1-5).

APA fails to specifically disclose refrain from transmitting for a time interval.

But, Atwater et al. discloses Bluetooth transceiver is deactivated (for a time interval) by the interoperability device whenever the IEEE 802.11 transceiver is activated and vice versa, column 6, lines 34-37.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Atwater et al.'s limitation because this would have allowed the decision to be made as which mode of operation to switch to or activate, column 6, line 38-39.

Allowable Subject Matter

5. Claims 8-10, 16, 26-28, 34, 44-46 and 50 are allowable.

Response to Arguments

6. Applicant's arguments filed July 14, 2011 have been considered, but are moot in view of the new grounds of rejection necessitated by arguments, the use of new prior art, and the allowable claims in the current prosecution of the application.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon Andrews whose telephone number is (571) 270-1801. The examiner can normally be reached on Monday through Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rao S. Seema can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leon Andrews/
Examiner, Art Unit 2462
November 10, 2011

/Kevin C. Harper/
Primary Examiner, Art Unit 2462